

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2004/018842

**A. CLASSIFICATION OF SUBJECT MATTER**  
Int.Cl<sup>7</sup> H01S5/024, H01L23/473

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> H01S5/024, H01L23/473

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

|                           |           |                            |           |
|---------------------------|-----------|----------------------------|-----------|
| Jitsuyo Shinan Koho       | 1922-1996 | Toroku Jitsuyo Shinan Koho | 1994-2005 |
| Kokai Jitsuyo Shinan Koho | 1971-2005 | Jitsuyo Shinan Toroku Koho | 1996-2005 |

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| Y         | JP 2003-273441 A (Hamamatsu Photonics Kabushiki Kaisha),<br>26 September, 2003 (26.09.03),<br>Full text; all drawings<br>(Family: none) | 1-11                  |
| Y         | JP 2003-152259 A (Hamamatsu Photonics Kabushiki Kaisha),<br>23 May, 2003 (23.05.03),<br>Full text; all drawings<br>(Family: none)       | 1-11                  |
| Y         | JP 11-121816 A (Morix Co., Ltd.),<br>30 April, 1999 (30.04.99),<br>Par. No. [0023]; Fig. 1<br>& WO 99/21234 A1                          | 1-11                  |

Further documents are listed in the continuation of Box C.

See patent family annex.

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|---|--|
| * Special categories of cited documents:  |  |
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| "E" earlier application or patent but published on or after the international filing date   | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |
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| "P" document published prior to the international filing date but later than the priority date claimed  |  |

Date of the actual completion of the international search  
14 March, 2005 (14.03.05)

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29 March, 2005 (29.03.05)

Name and mailing address of the ISA/  
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**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages                     | Relevant to claim No. |
|-----------|--|-----------------------|
| Y         | JP 2002-314281 A (Hitachi, Ltd.),<br>25 October, 2002 (25.10.02),<br>Par. No. [0019]<br>(Family: none) | 1-11                  |